

REMARKS

In this response, claims 1-11 have been cancelled without prejudice. In an effort to more clearly define the invention so as to overcome the objections and rejections set forth by the Examiner in the Office Action mailed February 11, 2005, Applicant has presented new claims 12-23. Reconsideration of the above-identified patent application is hereby requested.

CLAIM OBJECTIONS

The Examiner has objected to claims 6 and 11 as being informal due to missing periods at the end of both claims. As noted above, Applicant has cancelled claims 6 and 11 without prejudice. As such, Applicant respectfully requests withdrawal of this objection and notes that all newly presented claims include semicolons separating claim elements and periods at the end of each claim.

REJECTIONS UNDER 35 U.S.C. § 112

The Examiner has rejected claims 1-11 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter Applicant regards as his invention. In particular, the Examiner noted that claims 1, 4 and 9 contain more than one sentence. Further, claims 7 and 8 are incomplete sentences, thereby making it unclear what component referred to therein is without the top or bottom angle.

In this response, Applicant has cancelled claims 1-11 without prejudice. As such, Applicant hereby requests withdrawal of this rejection and submits that newly presented claim 12-23 comply with the requirements of 35 U.S.C. § 112, second paragraph. Specifically, all newly presented claims respectively consist of one complete sentence.

REJECTIONS UNDER 35 U.S.C. § 102

The Examiner has rejected claims 1 and 2 under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No. 5,717,164, issued to Shetterly. In this response, claims 1-11 have been cancelled without prejudice. However, the embodiment of the invention claimed in claim 1 is now claimed in newly presented claim 12. As such, Applicant respectfully traverses and requests reconsideration and withdrawal of this rejection in view of newly asserted claim 12 and the following discussion.

It is axiomatic that for a reference to be anticipatory, each and every feature in the claims must be disclosed by a single reference. Applicant respectfully submits that Shetterly does not anticipate the features present in newly presented claim 12 that facilitate wall penetration of flexible tubing such that the flexible tubing cannot kink inside the wall.

First, the apparatus disclosed in Shetterly is designed specifically to enhance the convenience with which a user can "wire an electrical outlet socket in a wall". U.S. Pat. No. 5,717, 164 at 2: 49-54. At no point does Shetterly disclose or suggest that the apparatus described and claimed therein can be used to facilitate wall penetration of flexible tubing. Nor does Shetterly teach or suggest an assembly capable of preventing the wire, or any material disposed therein, from becoming kinked inside the wall.

The Examiner also noted that Shetterly discloses a "square sleeve", which, *inter alia*, is "of predetermined inside dimensions to accommodate one or more wires, cables, or flexible tubing." However, Applicant believes that the "square sleeve" taught by Shetterly differs substantially from the elongated sleeve claimed in newly asserted claim 12. Specifically, Claim 12 refers to "an elongated sleeve comprised of a tube or channel having a first side, a second side and a first open end opposed

to a second open end whereby flexible tubing may be installed into the first open end, pass through the tube or channel, and exit the second open end;"

Shetterly does not include a tube or channel open on two opposed ends. Instead, the shield disclosed in Shetterly only teaches a box with one open end and holes in an *adjacent* side. At no point does Shetterly describe or suggest a tube or channel open on *opposed* ends. This distinction is significant since it precludes the shield taught by Shetterly from performing the primary function of the claimed invention, namely facilitating the installation of flexible tubing without kinking inside the wall.

Next, with respect to the Examiner's statement that Shetterly teaches a "sleeve bonded to the attachment plate at an angle (plate is set at an angle to surface 22)", Applicant points out that Claim 12 provides that the attachment plate is affixed to one side of the elongated sleeve at a geometric angle such that when the shield assembly is mounted to a building-framing stud, flexible tubing may be installed into through the shield assembly without kinking. Shetterly shows approximately a 90 angle between 17 and 23. The present invention is constructed with the appropriate angle for the flexible tubing being installed. In general, the larger flexible tubing is, the less of an angle it can be curved without kinking. Within the confines of typical frame walls, it is virtually impossible to install standard sizes of flexible tubing at a 90 degree angle without kinking. This is particularly true with ¾" and larger sizes of copper tubing that are used on virtually all split system air conditioning systems. Since the prevention of kinks is a primary goal of the present invention, Applicant submits that Shetterly does not anticipate the present invention.

Finally, Applicant notes that shield disclosed in Shetterly also lacks sufficient structure to prevent water infiltration into the wall when installed. As written, claim 12 requires the geometric angle between the attachment plate and the elongated tube [to be] such that, when the shield assembly is mounted to a building-framing stud, flexible tubing may be installed into the shield assembly without kinking. As a result, Claim 12 necessarily results in the elongated sleeve exhibiting a downward slope as it protrudes an exterior wall.

By contrast, Shetterly is designed as two or more separate pieces. U.S. Pat. No. 5,717,164 at 3: 65-66. Since the shield in Shetterly is designed for electrical outlets, when installed in an exterior wall, a separate cover plate is required to prevent exposure to electrically charged wires and to prevent water infiltration. The structure of claim 12 is a one piece shield assembly that slopes downward through an exterior wall when mounted. In addition to preventing kinking of flexible tubing inside the wall, such structure also prevents water infiltration into the exterior open end of the elongated sleeve without the need for additional protective structures.

With respect to Claim 2, Applicant notes that the embodiment claimed in claim 2 has been incorporated into newly asserted claim 14. By virtue of being dependant on independent claim 12, the embodiment of the invention claimed in claim 14 also includes the structural limitations of Claim 12. Therefore, dependant claim 14 is allowable over Shetterly for the same reasons asserted above in relation to Claim 12.

In view of the foregoing discussion and newly asserted Claims 12 and 14, Applicant submits that the § 102(b) rejection is overcome with respect to Shetterly. Thus, Applicant respectfully requests that the Shetterly § 102(b) rejection be withdrawn.

Similarly, the Examiner has rejected claims 1 and 3 under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No. 4,667,840, issued to Lindsey. In this response, Claims 1-11 have been cancelled without prejudice. However, the embodiment of the invention claimed in claim 1 is now claimed in newly presented claim 12. Likewise, the embodiment of the invention claimed in claim 3 has been incorporated into newly asserted Claim 14. As such, Applicant respectfully traverses and requests reconsideration and withdrawal of this rejection in view of newly asserted Claims 12 and 14 and the following discussion.

Applicant respectfully asserts that, for all intents and purposes, the invention disclosed in Lindsey is equivalent to that of Shetterly, with the exception that the Lindsey box is partially constructed of plastic. As such, Applicant submits that the above arguments asserted in support of the patentability of Claims 12 and 14 over Shetterly are also applicable to Lindsey.

Specifically, Lindsey is another device designed for electrical wiring. At no point does Lindsey disclose or suggest that the disclosed invention would prevent wire, or any material disposed therein, from becoming kinked inside the wall. Also, like Shetterly, Lindsey teaches the use of an open ended box rather than a tube or channel with openings on two *opposed* ends. The openings in the Lindsey box are on *adjacent* faces of the box.

The invention disclosed in Lindsey is also not constructed so the flexible tubing can be installed without kinking. The box is bonded to the attachment plate at a 90-degree angle. As discussed above, a 90-degree angle is not sufficient to prevent kinking of flexible tubing inside the wall in which the box is mounted. Finally, Lindsey, like Shetterly shows a box that

requires the use of two or more pieces to prevent water infiltration. As discussed above, the structure claimed in Claim 12 requires the elongated sleeve to slope downward as it protrudes through the exterior surface of a wall. This structure not only prevents kinking of flexible tubing inside the wall, but also resists water infiltration into the shield assembly without the use of separate structure(s).

With respect to Claim 3, Applicant notes that the embodiment claimed in claim 3 has been incorporated into newly asserted claim 14. By virtue of being dependant on independent Claim 12, the embodiment of the invention claimed in claim 14 also includes the structural limitations of Claim 12. Therefore, dependant claim 14 is allowable over Lindsey for the same reasons asserted in relation to Claim 12.

In view of the foregoing discussion and newly asserted Claims 12 and 14, Applicant submits that the § 102(b) rejection is overcome with respect to Lindsey. Thus, Applicant respectfully requests that the Lindsey § 102(b) rejection be withdrawn.

Next, the Examiner has rejected claims 4 and 5 under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No. 269,086, issued to McLaughlin. In this response, Claims 1-11 have been cancelled without prejudice. However, the embodiment of the invention claimed in claim 4 is now claimed in newly presented Claim 18, which depends from newly asserted Claim 15. Likewise, the embodiment of the invention claimed in claim 5 has been incorporated into newly asserted Claim 19. As such, Applicant respectfully traverses and requests reconsideration and withdrawal of this rejection in view of newly asserted Claims 15, 18 and 19 and the following discussion.

Claim 15 now refers to "A shield assembly for wall penetration of flexible tubing". McLaughlin refers to a "conduit

for electrical conductors" and does not teach or suggest using the disclosed invention for wall penetration of flexible tubing. The stated intent in McLaughlin is to make the installation of wiring simpler. See U.S. Pat. No. 269,086 at lines 81-88. However, the conduit disclosed in McLaughlin does nothing to prevent kinks in flexible tubing inside a wall when tubing is curved from inside the wall to the exterior.

The invention disclosed in McLaughlin also lacks the one or more structural limitations claimed in newly asserted claim 15. By virtue of being dependant on newly asserted Claim 15, these structural limitations are necessarily absent with respect to Claims 18 and 19 as well. First, as written, Claim 15 requires the attachment angle to be "affixed to one of the top side of the elongated tube or channel *along the edge of the first open end* or across the vertical midsection of the bottom side of the elongated tube or channel". Claim 18 requires the use of two attachment angles, one attached on the top side of the elongated tube as described in Claim 15, the other being affixed to the bottom side of the elongated tube as described in Claim 15.

McLaughlin lacks this structural limitation. Instead, referring element "d" in Figures 1 or 5 of McLaughlin, Applicant notes that the disclosed invention shows only the use of attachment flanges that are mounted on opposed corners, along the longitudinal side of the conduit. At no point does McLaughlin teach or suggest an attachment angle(s) affixed to the conduit in a manner required by Claim 15 and, therefore, by Claim 18.

Another limitation of Claims 15 18 and 19 that is absent from McLaughlin is the requirement of attachment angles with mounting holes "for installation of mounting hardware". In McLaughlin, the "lugs d", are designed for bolts that are used to hold the assembly itself together and NOT for this

installation of mounting hardware. U.S. Pat. No. 296,086 at lines 51-57. To be sure, the conduit taught by McLaughlin consists of two L shaped pieces that are drawn together by the bolts. It is not clear how the assembly is to be mounted or even to what the assembly is to be mounted.

Accordingly, Applicant submits that McLaughlin lacks both the attachment angles and the attachment holes required in Claims 15, 18 and 19. Consequently, McLaughlin, by necessity, does not teach an "attachment angle affixed to the elongated sleeve at a geometric angle whereby after said shield assembly is mounted to a stud wall, flexible tubing installed in the shield assembly can be installed without kinking" as required by Claims 15, 18 and 19. Instead, Applicant respectfully notes that, McLaughlin, at best, appears to be intended to be installed at a 90-degree angle. As noted above, such an angle is insufficient to prevent flexible tubing from becoming kinked inside the wall in which the assembly is mounted.

In view of the foregoing discussion and newly asserted Claims 15, 18 and 19, Applicant submits that the § 102(b) rejection is overcome with respect to McLaughlin. Thus, Applicant respectfully requests that the McLaughlin § 102(b) rejection be withdrawn.

Finally, the Examiner has rejected Claims 4 and 7-9 under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No. 3,575,313, issued to Trachtenberg. In this response, Claims 1-11 have been cancelled without prejudice. The embodiment of the invention claimed in Claim 4 is now claimed in newly asserted Claim 18, which depends from newly asserted Claim 15. The embodiment of the invention claimed in Claims 7 and 8 have been incorporated into newly asserted Claim 15. Likewise, the embodiment of the invention claimed in Claim 9 is claimed in newly asserted Claim 21. As such, Applicant respectfully

traverses and requests reconsideration and withdrawal of this rejection in view of newly asserted Claims 15, 18 and 21 and the following discussion.

First, Applicant respectfully notes that Trachtenberg does not teach or suggest use of the disclosed "Mounting Means for Plastic Outlet Boxes" as a means to prevent kinking of flexible tubing inside a wall. As such, Applicant submits that the invention taught by Trachtenberg lacks one or more of the structures required in Claims 15, 18 and 21 of the present application.

First, all of claims 15, 18 and 21 require an elongated sleeve comprised of a tube or channel having openings on two opposed ends, such that flexible tubing may be installed through one open end, through the tube or channel and out the opposed open end. The invention disclosed in Trachtenberg lacks this element. Referring to the Figures in Trachtenberg, Applicant submits that the box depicted therein can only be described as an open faced box with holed disposed in an *adjacent* side of the box. The box is not elongated and there is no opening opposed to the open face of the box. This distinction is significant because the design of the tube or channel is crucial for enabling the installation of flexible tubing without kinking. As such, the box taught in Trachtenberg is designed such that it would preclude installation of flexible tubing without kinking.

Next, the Examiner noted that Trachtenberg shows a shield for wall penetration of flexible tubing having, "one of the attachment angles 14 bonded to the top of the sleeve and the other attachment angle bonded to the midsection of the opposite side of the sleeve (bottom angle 14 is bonded by clips 22 to the midsection of the bottom edge of the sleeve 10, see fig. 1)". With respect to Claims 15 and 18, Applicant respectfully notes that both Claims 15 and 18 require the bottom attachment angle

to be affixed to the vertical midsection of the bottom side of the elongated tube. By contrast, the bottom angle of Trachtenberg teaches only a bottom angle 14 bonded to the horizontal midsection of the bottom edge of the box. With respect to Claim 21, Applicant points out that Trachtenberg teaches the use of two attachment angles bonded to the top and bottom of the box. By contrast, newly asserted Claim 21 claims the use of one attachment angle affixed to the side of the elongated sleeve.

Finally, the Examiner states that, in Trachtenberg, "[t]he sleeve [is] bonded to the attachment angles at an angle." Applicant respectfully notes that the angle taught by Trachtenberg is a 90-degree angle. However, as written, all of Claims 15, 18 and 21 now require the attachment angle(s) to be affixed to the elongated tube at a geometric angle such that, when the shield assembly is mounted to the building exterior sheathing, flexible tubing may be installed through the shield assembly without kinking. As noted above, a 90-degree angle is insufficient to preventing flexible tubing from becoming kinked inside the wall when installed through a shield.

In view of the foregoing discussion and newly asserted Claims 15, 18 and 21, Applicant submits that the § 102(b) rejection is overcome with respect to Trachtenberg. Thus, Applicant respectfully requests that the Trachtenberg § 102(b) rejection be withdrawn.

REJECTIONS UNDER 35 U.S.C. § 103

The Examiner has rejected Claim 5-6 and 10-11 under 35 U.S.C. § 103(a) as being unpatentable over Trachtenberg. Specifically, the Examiner states that, it would have been obvious to make the sleeve and angle out of either plastic or metal because the selection of a known material based on its

suitability for the intended use is a design consideration within the skill of the art." In this response, Applicant has cancelled Claims 1-11 without prejudice. However, newly asserted claim 19, claims the shield assembly of Claim 15 wherein the elongated sleeve is comprised of durable material selected from the group comprising at least one of metal, polyvinyl chloride (PVC) or plastic. Likewise, newly asserted Claim 23 claims the shield assembly of Claim 21, wherein the elongated sleeve is comprised of durable material selected from the group comprising at least one of metal, polyvinyl chloride (PVC) or plastic.

Applicant respectfully submits that the arguments in favor of patentability asserted with respect to the Trachtenberg reference remove Trachtenberg as prior art under 35 U.S.C. § 102. As such, Trachtenberg cannot properly be used render the claimed invention obvious under 35 U.S.C. § 103(a). 35 U.S.C. § 103(a). As such, Applicant respectfully request withdrawal of the Trachtenberg § 103 rejection.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the examiner agrees but does not feel that the present claims are technically adequate, applicant respectfully requests that the examiner write acceptable claims pursuant to MPEP 707.07(j).

Respectfully submitted,

Dated: 5-10-5

By: 
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